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# 2003 Annual Report of the Environmental Finance Center Network

## Region 10 - Boise State University

*A key focus of the EFC at Boise State University is utility rate setting and capital improvement planning for environmental facilities*

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### Introduction

The primary focus of the EFC at Boise State University (EFC10) is the development of broadly applicable, practical tools that improve the efficiency and effectiveness of environmental systems in meeting the challenges of protecting the environment and public health. The EFC creates computer-based techniques that provide important information for decision makers to use in financing environmental systems.

The Environmental Finance Center at Boise State University was created in 1995 and first received funding in the fall of 1996. The EFC at BSU is contained within the Department of Public Policy and Administration of the College of Social Science and Public Affairs. The EFC serves the Region 10 communities of the Pacific Northwest and the Intermountain states of Alaska, Idaho, Oregon and Washington. The EFC has also provided it specialized services and tools in other areas throughout the country. The mission of the EFC is to help communities with the “how to pay” issues of environmental protection. This report outlines the EFC’s accomplishments in 2003, new initiatives for 2004, network collaborations, presentations and results.

## Accomplishments

### *Focus on Watershed Financing Activities*

The 2002 Annual Report of the Boise State University EFC (EFC10) introduced the division of activities between the focus areas of “macro-environmental” and “micro-environmental” finance. This division is useful in separating our traditional utility-based financing work from the emerging challenges of financing non-point pollution reduction at the watershed level. The 2003 Annual report highlights our activities in the watershed financing or “macro-environmental” arena.

### *Watershed Financing: the Macro-Environmental Finance Activities*

Watershed restoration is important throughout the region. Watershed planning activities are increasing each year in response to the need to protect these valuable resources. In order for watershed planning and implementation to be effective, identification and acquisition of resources is necessary. Previous workshops conducted by the Center have helped to promote stewardship by improving stakeholders’ capacity to develop long-term funding strategies for protection and restoration activities. However, different levels of sophistication exist between watershed groups. This difference in sophistication level creates challenges in the workshop to insure all participants receive valuable tools for their funding challenges. In response to this need, the Center tailored their workshops to levels that best addressed these different needs. The EFC presented 8 watershed funding workshops throughout Region 10 in 2003.

### *Watershed Funding Workshops – Oregon*

EFC10 presented three workshops in Oregon during 2003. The EFC worked closely with the Oregon Watershed Enhancement Board and the EPA Region 10 to target attendees and coordinate the timing and location of workshops to maximize participation. Workshop locations included Eugene, Pendleton and the Klamath Basin. Each workshop was tailored to the specific needs of the watershed.

At each workshop, attendees received CD’s with the Directory of Watershed Resources which included federal, private and state specific information on funding programs and *Plan2Fund*, an access based planning program.

Following the workshops there were several requests for further information and additional assistance. Participants have expressed interest in information on what other communities are doing to address the issues of funding watershed strategies. The Environmental Finance

Center will continue to be a conduit for sharing funding information and examples of funding strategies in Region 10.

Eugene: EFC10 delivered a workshop at the Oregon Water and Electric Board (OWEB) Office on May 22, 2003. The EFC worked with OWEB to advertise the Eugene Workshop through e-mail notices, web postings and newspaper and newsletter advertisements. Fifteen CD-ROMs were delivered to workshop participants with an additional five requested from those who could not attend.

Pendleton: The primary focus of the workshop was to promote financial planning on a watershed scale and to improve awareness of alternative funding techniques for stakeholders involved with watershed restoration activities for Total Maximum Daily Load (TMDL) implementation. EFC10 worked with the EPA and state of Oregon on determining the timing and selection of the workshop location based on TMDL schedules and watershed needs. Twenty-five people attended the workshop and each received CD's with funding information, planning tools and handout materials. Additional CDs were requested from both attendees and stakeholders who could not attend the workshop. A total of 35 CDs were distributed.

Klamath Basin: EFC10 presented an advanced workshop to address the unique and complicated issues present in the Klamath Basin. The Klamath Basin has been the scene of bitter battles over environmental and economic values, which were prominently expressed in the national media during the summer of 2002. The EFC worked with the Oregon Watershed Enhancement Board and the Klamath Watershed Council to identify key stakeholders and target participants. The EFC facilitated a discussion on coordinating watershed efforts of stakeholders in the basin and identify challenges and potential solutions.

Twenty-five people attended the workshop. The workshop resulted in a request from the group for additional follow-up research from the EFC on cost effectiveness of agricultural best management practices (BMPs). This request is expected to result in the development in 2004-5 of a new software tool to be cooperatively designed and tested by the EFC and professors in the Boise State University's College of Business and Economics—an excellent example of the multidisciplinary skills that reside in the EFCN's member universities.

Following the workshop, EFC10 conducted a research study to determine how a cost-benefit model could meet the needs of the watershed group. This study revealed a number of important points. First, there are many resources for information about economic incentives for agricultural best management practices. In addition to finding resources for information about Best Management Practices (BMPs) and cost-benefit analysis, we tried to determine whether there are any existing models that could be used by the watershed group. While we did find some useful examples, we did not find a model that would specifically address the water quality issues in the Klamath Basin. A third, related finding of our research is that there

is great potential for working together with other organizations to develop a model that not only meets the needs of the watershed group, but also can be adapted to provide useful output for other conditions. The EFC is continuing to investigate potential opportunities to develop this model.

### *Watershed Funding Workshops – Washington*

EFC10 presented two workshops in Washington during 2003. The EFC worked closely with the Washington Public Works Board and EPA Region 10 to target attendees and coordinate the timing and location of workshops to maximize participation. Workshop locations included Ritzville and Seattle.

At each workshop, attendees received CD's with the Directory of Watershed Resources which included federal, private and state specific information on funding programs and Plan2Fund, an access based planning program.

Seattle: EFC10 provided a stakeholder workshop in Seattle on October 21, 2003. 23 participants attended the workshop and an additional 11 CD ROMs were requested.

Ritzville: EFC10 presented a workshop in Ritzville Washington through a contract with the Washington Public Works Board. 9 participants attended the workshop. The workshop was well received. One participant commented after seeing *Plan2Fund* that he wished he had received a copy earlier. His community had just hired an engineering firm to develop a similar program and had charged thousands of dollars.

### *Alaska Watershed Funding Workshop (Anchorage)*

EFC10 conducted a watershed-funding workshop on February 10<sup>th</sup>, 2003 at the Alaska Forum on the Environment in Anchorage, Alaska. The EFC worked with EPA Region 10 and the Alaska Forum on the Environment staff to coordinate the workshop.

Approximately 30 people attended the workshop and requests were made for additional information and assistance. The EFC was contacted by workshop attendees after the workshop concerning specific funding needs and assisted participants in locating potential funding for those specific projects. Attendees received the Directory of Watershed Resources on CD-ROM containing state specific funding information.

### *Tribal Roundtable and Workshop (Yakima)*

EFC10 participated in the Tribal Roundtable in Yakima Washington. At the Roundtable the EFC was able to assist with facilitation of small group discussions, and inform attendees about

the EFC's services and tools. In addition, the EFC provided a two-day watershed funding workshop and training session following the roundtable. There were 23 people who attended the workshops from various tribes, agencies and communities. Each attendee had access to a computer during the workshop, which allowed participants to use Plan2Fund and the Directory of Watershed Resources in a case study exercise during the workshop. Following the workshop, an additional 50 Directory cards were handed out at the River Network Conference by workshop attendees.

### *EPA Watershed Financing Demonstration Workshop (Seattle, WA)*

EFC10 provides valuable tools and resources to many stakeholders working on watershed protection and restoration. Making these services known is a continuing effort. For this reason, it is important that EPA staff and other agencies in constant contact with watershed stakeholders be aware of the information, resources and tools we provide. The EFC conducted a workshop in Seattle Washington for EPA Region 10 staff in the state of Washington. Key staff was targeted to attend from EPA Region 10 as well as other federal agency staff.

The demonstration workshop was held on October 21, 2003, one day prior to the Region 10 Watershed Financing Charrette. The purpose of this workshop was twofold: first was to familiarize EPA Region 10 staff with the tools and services that the Center provides to local watershed groups in the Northwest. For example, the workshop provided the participants with the Center's database of funding resources, which demonstrated how to acquire information on EPA and other federal, state, local and private funding sources. The second goal of the demonstration workshop was to orient EPA staff on the techniques that the Center uses to teach watershed organizations to discover and leverage funding resources to implement multiple-year implementation plans. Twenty people attended the workshop and received CDs with the EFC tools and workshop materials.

### *EPA Internal Watershed Financing Charrette*

Due to the complexities of programs offered within the EPA and other agencies, it is difficult for watershed stakeholders to know what programs are available and how they can be leveraged with other resources. The perceived lack of coordination internally at EPA also creates challenges for program managers in making funding decisions. Funding overlap sometimes occurs when information from other funding programs is unavailable to program managers.

Coordination within the EPA and between various state and federal agencies would provide a valuable resource to watershed stakeholders in developing a funding plan that maximizes available resources. It would also help program administrators to find ways to coordinate and leverage funds as well as direct their clients to other sources.

To address this need, EFC10 facilitated a Charrette to coordinate the various program staff and identify how different programs can better work together to leverage resources and maximize benefits to watershed stakeholders. The EPA Region 10 Internal Coordination Charrette brought together 24 key EPA staff and provided a forum for frank discussions about funding processes and management challenges within Region 10 EPA. The Charrette provided a direct mechanism for ensuring meaningful, constructive and well directed two-way communication and allowed the group to identify solutions to funding integration dilemmas. The outcome of the charrette was a clear vision on the interests of the Region 10 staff and a commitment from program leads to utilize leveraging opportunities to protect and restore watersheds.

The Charrette resulted in a three-step plan for improving internal coordination at EPA Region 10. The plan included developing an integrated funding process, tracking funding data at a watershed level, and directing applicants to additional funding sources. Three tasks were identified during the Charrette to improve internal coordination at EPA Region 10:

1. Identify initial programs under EPA control for potential consolidation
2. Improve data tracking system to gather data at the watershed level.
3. Direct applicants to other sources of funding.

A second charrette to coordinate federal agencies is planned for fiscal year 2004 - 2005.

### *Directory of Watershed Resources*

Communities across the country face a range of complex funding challenges as they attempt to meet the demands of environmental protection. The Environmental Finance Center at Boise State University (EFC10) has provided watershed funding workshops throughout Region 10 to assist local communities in finding creative funding solutions to support their own plans for environmental protection. As part of this effort, the EFC provides watershed stakeholders with the funding information they need to make decisions and protect their resource.

There is a tremendous volume of information available for funding watershed restoration. However, finding and sorting through this information can be a daunting task. In addition, demands for up to date information on financial resources and financing tools has increased. This is especially true for workshop participants who are oriented to the financial tools and sources and who need further information after the workshops are delivered.

In an effort to address this need, the EFC began creating an on-line, searchable database for watershed restoration funding in the fall of 2002. This database was completed in 2003 and has been a huge success, identifying nearly 730 programs within Region 10. The database includes information on funding programs available for federal, state (Oregon, Washington,

Idaho, and Alaska), private, and other funding sources. Users can query the information in a variety of ways including agency sponsor, keyword, or by a detailed search. At the end of a query, a brief description of each matching program will be displayed. When a specific program is selected, a detailed page of that program will be displayed and can be printed.

For this database to continue to be a resource for watershed stakeholders, the information must be kept accurate and up to date. The Center has continued to add and update programs in the database, adding nearly 150 programs in 2003. In addition, an email function was added to the directory, which will allow the EFC to send an annual email to each program contact with a link to their specific programs for review. This will provide additional verification with program contacts to ensure accuracy. Changes can be emailed or made on an online form on the website. The first email is planned for 2004.

Due to the lack of affordable Internet in many areas, the EFC developed the ability to create an up to date CD-ROM version of the Directory. These CD's are available free of charge upon request. In 2003 the EFC distributed approximately 1400 CDs at workshops, conferences and through email and phone requests.

In addition the Directory is available online. There were over 1,000 visits to the Directory in 2003, with approximately one hundred visitors to the site per month with the numbers growing as people become aware of the resource. In addition, several agencies have begun to link to the Directory website and are directing unfunded applicants to the EFC for assistance.

### *Region 4 Directory Project*

The response to the Directory of Watershed Resources has been extremely positive and has generated a strong demand for this tool in other regions. In 2003 the EFC worked with the EFC in Region 4 to extend the function of the database for use in Region 4. EFC10 converted its on-line watershed financing database for the use of the Environmental Finance Center at University of North Carolina at Chapel Hill (EFC@UNC). This provided a framework for the database created for the EFC at University of North Carolina, reducing duplication and allowing for costs savings. This project is an excellent example of how the Environmental Finance Center Network allows the partner universities to efficiently leverage resources in serving the public in our separate EPA Regions.

### *Plan2Fund™*

The Boise State EFC's (EFC10) field work proved that many watershed groups struggle with the task of moving from the actual watershed plan to locating funding sources. Attendees at our workshops often want to know what sources of funding are available; however, they have

not identified watershed restoration priorities or established time frames for activities. Without a clear funding strategy, they are overwhelmed with the implementation process. Participants have expressed an interest in information on funding capacity and operating costs as well as tools to assist them in the financial planning process. During 2003, the EFC responded to these requests by developing new tools to meet their needs and help them move from the planning process to developing a funding strategy for implementation. The result of this effort was *Plan2Fund*, a watershed strategic planning and funding tool that helps organizations determine their funding needs to meet the goals and objectives of their watershed restoration program plan.

*Plan2Fund*<sup>TM</sup> was developed in Microsoft Access and is a database model that walks users through the process of estimating the costs of their Watershed Program Plan's Goals and Objectives, assessing any local matches, and determining funding needs to meet Goals and Objectives. The results from *Plan2Fund*<sup>TM</sup> can be used to search for funding sources utilizing the Environmental Finance Center's internet-based Directory of Watershed Resources. Several hundred copies of *Plan2Fund* have been distributed free of charge to conference attendees and workshop participants. In addition, over 140 people have downloaded *Plan2Fund* from the EFC's website at <http://sspa.boisestate.edu/efc>. EFC10 will continue to identify ways to enhance *Plan2Fund* in the future.

### *Source Water Protection*

In 2001, the Boise State EFC began collaborating with the EFCs at the Universities of New Mexico, North Carolina, Syracuse and Maryland on a project related to source water protection project funded by EPA. The EFC focused its efforts on two projects. The first focuses on facilitating water source protection financial planning in Blaine County, Idaho involving federal, state and private land ownership and shallow groundwater. During 2003 the group developed a draft drinking water protection plan for Blaine County. The EFC drafted the education and outreach portion of the plan and has developed a matrix of potential funding sources for implementation. To date, Blaine County has invested \$32,000 for drinking water protection activities including additional monitoring, nitrogen studies and education activities. The group hopes to leverage the counties contributions in order to increase protection activities in the future. The EFC will continue working with the committee to finalize the drinking water protection plan and implementation strategy.

The second project is located in the cities of Sweet Home, Lebanon and Albany in Oregon. This project involves federal, state and private land, TMDL and ESA compliance issues and surface water use for drinking water source protection. In 2003, the EFC assisted in drafting a Drinking Water Protection Plan for the three communities. The EFC will continue to assist in finalizing the plan and in developing an implementation strategy.



The ultimate goal of the two projects is to use the results of the stakeholder processes to inform policy makers about the challenges that small communities face in meeting source water protection planning objectives, such as fostering stakeholder participation and cooperation, gaining consensus on need for voluntary and programmatic efforts necessary to protect water sources, and developing financial resources for plan implementation.

### *Idaho Source Water Protection Collaboration Group*

Through the work of EFC10 on the source water protection pilot demonstration project in Idaho, the EFC has initiated a number of discussions between various federal, state and local organizations. The result has been the creation of an informal group in Idaho that meets to share information on source water protection issues and efforts. This Source Water Protection Coordination Group consists of Idaho DEQ, EPA Region X, Idaho Rural Water Association, Idaho Association of Soil Conservation Districts, University of Idaho Cooperative Extension, Idaho Department of Water Resources, Idaho Water Resource Research Institute, Association of Idaho Cities, and the Idaho Association of Counties among others. The group continues to meet regularly to discuss protection efforts and potential collaborations within Idaho.

## **Meetings / Conferences / Presentations and Technical Assistance**

As EFC10 delivers watershed-funding workshops in the region, the demand for information on funding resources and financing tools has increased. Participants often pass information on the other stakeholders who contact the EFC for additional information and assistance. In addition, EFC10 is often contacted by agencies and organizations that would like us to participate in conferences, meeting and various watershed events. In order to continually provide services to those needing assistance throughout Region 10, it is necessary to plan for these unanticipated activities. The following are a few of the activities for which EFC10 provided assistance.

### *EPA Source Water Protection Annual Conference June 2 - 4, 2003*

The EFC participated in the EPA's annual Source Water Protection Conference in 2003. The conference brought together various Federal, Tribal, State, and local officials; watershed managers; conservation partners; citizens and others to learn about effective actions that prevent contamination of drinking water sources. The Center, along with other EFC's presented a technical assistance training short course on funding options for watershed protection. The EFCN was also part of the plenary session "Financing the Journey to Protection" and staffed a table at the Resource Fair portion of the conference. The Directory of Watershed Resources was available online for display and information on the EFC and the

services and tools the Center provides was available. In addition, the EFC Unified Source Water Protection Pilot Project in Blaine County Idaho was also highlighted at the conference.

### *Vietnam PSU Presentation*

At the invitation of EFAB Member Langdon Marsh, EFC10 participated in a pilot project to assist the City of Ho Chi Minh in devising new strategies and methods for working collaboratively with the community, citizens, environmental groups and business leaders to leverage community pressure and market forces to meet environmental challenges. Population and urbanization have placed tremendous pressure on drainage and sewerage systems in Ho Chi Minh City. The city's many canals and waterways have become dumping sites for solid waste, and domestic and household wastes, which pose significant health risks to the local population.

The EFC was asked to speak to the Vietnam delegation on financing strategies for environmental protection as part of a pilot project to provide technical support, information and other resources that will establish a process for voluntary community participation in canal restoration. Fifteen (15) people attended the presentation. In addition to the Vietnam delegation, the Portland Environmental Services, Johnson Creek Watershed Council and the Oregon Economic and Community Development Department also attended. The message of multiple funding sources to meet the demands of the city was well received. The EFC also provided the delegation with the tools and resources the EFC has developed for Region 10 to assist with similar challenges.

### *Watershed Initiative Conference*

The EFC participated in the Watershed Initiative Conference presented by Portland State University and the EPA for recipients of the Watershed Initiative grant program. The purpose of the conference was to transfer information about innovative technical tools available for watershed restoration, protection and management, and where to get more information at the federal, state, tribal and local levels. The EFC presented a condensed workshop and provided recipients with *Plan2Fund* and Directory of Watershed Resources CDs. The response to the tools was very positive and the group expressed a need to expand the Directory to other regions.

### *WSU Satellite Broadcast "Funding for Watershed Restoration"*

EFC10 participated in the "Funding for Watershed Restoration" satellite program presented by Washington State University. The two-hour program was broadcast via satellite and Internet on November 18th, 2003. The EFC presented information on financing watershed restoration using a case study and walking viewers through the planning process using

*Plan2Fund* and the Directory of Watershed Resources. The format of the broadcast allowed for questions from the remote audiences through phone lines, fax, and e-mail. In addition, a chat line was established where the EFC continues to answer questions posted to the website concerning financing watershed restoration.

The satellite was broadcast to over 37 Counties in Idaho Washington and Oregon. Over nearly 980 CD's were distributed to attendees containing the Directory and *Plan2Fund*. In addition, the broadcast continues to be available and viewed online.

### *Funders Fair*

Congressman Michael Simpson (ID) requested the EFC's participation in two funding fairs offered in Albion and Idaho Falls, Idaho. The fairs targeted rural stakeholders in Southeast and South central Idaho facing financing challenges in infrastructure, agriculture and natural resources, small business and art and historical fields of interest. At the fair, EFC10 was able to present valuable information and resources to participants. In addition the EFC hosted a display booth at each fair and provided CD's and information with other agencies and participants. As a result of the fair, several participants requested additional assistance including Representative Simpson's new grants assistance staff.

### *Coastal America Program*

EFC10 is working with the regional Coastal America coordinating team to develop greater use of the Coastal America program in the northwest. The EFC will continue to assist Coastal America in identifying opportunities for public private partnerships in Region 10.

### *Other Conferences*

- The EFC participated in the Brownfields Conference held in Portland, Oregon in October 2003. The EFC helped staff an EFC Network (EFCN) table and provided information on the tools and resources available at EFC10. The EFC expanded their database to contain Brownfield funding information and over 50 CD ROMs of the Guidebook of Financial Tools, *Plan2Fund* and the Directory of Watershed Resources were distributed at the conference. In addition, EFC10 was able to gather information on additional private funding sources at the conference to add to the database.
- EFC10 was asked to make a presentation at the Office of Water Regional EPA Office of Water Regional Directors meeting with EPA Assistant Administrator Tracy Mehan in Seattle during 2003. The EFC received very positive feedback on its tools and resources and the presentation initiated discussions of potential opportunities to extend these resources to other regions and expanded applications.

- EFC10 provided assistance, resources and CDs to additional conferences including the EPA Tribal Conference in Coeur d'Alene Idaho, distributing 25 CDs and the TMDL conference in Stevenson Washington in October 2003 where 100 CDs were distributed to attendees. The EFC is committed to continue assisting and providing resources within Region 10.

### *Watershed Funding Customer Service Assistance*

In 2002, the Center established a toll free telephone number for watershed stakeholders to call if they needed one-on-one technical service assistance when searching for watershed funding within Region 10. The service was continued in 2003 to provide assistance in searching the Directory of Watershed Resources as well as provide additional information on financing tools, resources, contact information, and other resources. Through phone and e-mail requests, an additional 150 Directory of Watershed Resources and *Plan2Fund* CDs have been sent in 2003. The Center plans to continue this service for Region 10 in the future.

### *EFC Information Activities - Website*

The activities of EFC10 are profiled at the Center's Intranet website [<http://sspa.boisestate.edu/efc>]. This allows EFC10 to provide information on our programs and projects without incurring the expenses of publishing a newsletter or other periodical. Information such as *The Watershed News* newsletter, various PowerPoint presentations, *Plan2Fund* program download and new publications were added to the website during 2003. The EFC remains committed to keeping their website current and up to date.

### *Newsletter Task 3: Watershed E-Newsletter*

During 2003 the Center released the first issue of *The Watershed News*, a quarterly newsletter for watershed stakeholders within Region 10. *The Watershed News* is designed to provide watershed stakeholders with information and resources to assist in finding innovative ways to pay for watershed protection. The newsletter focuses on funding issues within the region and contains information on upcoming events, success stories, up-coming grant proposals, specific resources and agency programs. The newsletter was sent to over 400 recipients. The group was devised of past workshop attendees, watershed groups, various EFC contacts, and local governments. The newsletter is also available on the EFC's website. The response from the first issue has been very positive. Several have commented that they have forwarded the newsletter to other recipients. The EFC will continue to provide the newsletter on a quarterly basis.

## New Initiatives For 2004

EFC10 will pursue several new initiatives in 2004 in the policy areas of safe drinking water, watershed protection and air pollution.

### *Watershed Funding Workshops*

The EFC has 10 workshops scheduled for 2004 in Idaho, Oregon, Washington and Alaska. The workshops will be presented in basic, intermediate and advanced formats and tailored to the specific needs of the watershed. The EFC will work with the EPA Region 10 and the States in planning these workshops. The EFC will provide ongoing support to watershed groups in implementing long-term funding strategies.

### *Directory of Watershed Resources*

The EFC will continue to update and expand the Directory of Watershed Resources. In addition, the EFC is discussing potential collaborations with the EFC Network to extend the database to other regions. See following section on **Network Collaborations** for details.

### *Washington State Resource Fair*

The Center will participate in an open house of watershed resource providers, presented by the Washington Department of Ecology. The event will be an informational session that gives watershed groups, local governments, nonprofit agencies and other watershed stakeholders a chance to meet and talk first hand with resource providers. The Center will staff an information booth, provide handout materials and discuss funding tools and information with attendees including *Plan2Fund*, the Directory of Watershed Resources, the Guidebook of Financial tools and other information. The open house will allow the Center to share our resources and expertise with several watershed stakeholders in Washington.

### *Utility Financing: the Micro-Environmental Finance Activities*

Until 2000 the activities of the EFC revolved around water and waste-water utility finance. Our utility finance work forms the core of our “micro-environmental” finance activities. In 2003 the EFC unveiled its new water system rate setting model, RateCheckup. In addition, our asset inventory and financial planning model – CAPFinance – gained broader national acceptance by utility finance professional. An additional tool development effort involving handheld computer technology – the personal digital assistant (PDA) – has shown tremendous potential for improving information collection about the nation’s public drinking water

systems. PDA-based information management systems are expected to improve the productivity of environmental protection programs that rely upon the timely collection of inspection data about regulated entities.

### *RateCheckup™*

In 2002 the EFC saw a need to replace RateMod Pro as its primary water rate setting tool due to the inability of integrating it with modern computer operating system language and technologies. The EFC conceptualized RateCheckup as a replacement to meet the challenges of new technologies and provide a user-friendly tool for rate setting. In 2003 RateCheckup™ went from a conceptual idea to a Microsoft Excel based program for use by small and medium water systems as a primer for setting rates. The new model will enable the EFC to reach a maximum number of water systems and provide better training on rate setting to those systems.

When software tools are developed at the EFC we seek to build upon our established products to both leverage previous research and development as well as to maximize functional integration between tools. The foundation of the RateCheckup software was a long-range budget planning tool developed for the Washington Public Works Board to assess the financial capacity of Drinking Water State Revolving Fund applicants. In addition, the EFC's water conservation cost-benefit model (a decision making tool developed by the Center and co-funded by the Washington Department of Health's Drinking Water Program) was incorporated into the new rate setting tool to meet the needs of water systems pricing water during drought conditions – a chronic problem in some intermountain west communities. In addition, the rate model utilizes the capital infrastructure renewal and replacement calculations derived from CAPFinance™ in helping water utility systems determine its need for money.

A primary goal for developing RateCheckup was to ensure that the EFC could build a tool that incorporated all of the necessary components of full cost pricing of water service while keeping in mind that it needed to be user-friendly and simple to use. To ensure acceptance and familiarity Microsoft Excel was chosen as the software platform for RateCheckup because of its broad availability and ease of use. RateCheckup utilizes wizards and command buttons to create a user-friendly environment.

In October of 2003 RateCheckup was released for beta testing to a peer review group selected by the EFC. As we look ahead to finalizing the software the EFC will incorporate comments or enhancements that surface based on the RateCheckup Beta to ensure that the software meets the needs of communities. After completion of the software the EFC will begin using the tool in a class setting to illustrate how RateCheckup can be used for utility rate setting and planning.

### *Air Pollution Issues*

In 2004, EFC10 will be working with the Community Planning Association of the Treasure Valley in Idaho (COMPASS) on air pollution issues in the Boise area. Specifically, EFC10 will be working with COMPASS on the idea of implementing a voluntary cap on ozone and PM2.5 emissions as a way to meeting future air pollution limits. EFC10 will be addressing the finance considerations of implementing incentives for businesses, development, and individuals who are interested in taking voluntary actions to reduce air pollution levels in the valley.

### *Personal Digital Assistant (PDA) Sanitary Survey*

As part of an ongoing effort to deliver safe drinking water to communities the EFC has continued its involvement in the use of hand held technology for sanitary survey inspections. The EFC worked with the Idaho Department of Environmental Quality to deliver the first sanitary survey that could be conducted utilizing Pocket PC technology. Hand held computer technology offers significant potential for improving inspector productivity, acquiring accurate and complete information about the nation's public water systems, improved management use of inspection information, and effective monitoring and correction of sanitary defects of water systems.

Although the first iteration needed further enhancement to meet the growing needs of inspectors and offer greater flexibility, the software became the baseline for what has become a national version. Through the combined work of the US Environmental Protection Agency Drinking Water Academy and the EFC, efforts have been made to expand upon the Electronic Sanitary Survey created for Idaho.

In February of 2003 the Drinking Water Academy put together a team of individuals with experience in sanitary survey training, programming, laws and regulation, as well as drinking water program officials of the states in Region I of the EPA. Through the efforts of this group, a review process of Idaho electronic sanitary survey was conducted to identify what components could be used and to identify any additional components that would be needed for a national model. Through additional collaboration between the Drinking Water Academy, Northbridge Environmental Consultants in Boston, and the Environmental Finance Center, work commenced on developing a national Electronic Sanitary Survey that could be adopted by all states.

The software has been developed in Visual Basic.Net taking advantage of the Visual Studio development environment created by Microsoft®. This technology had been married with Microsoft Access® to control the flow, setup, and storage of data. Through the use of

eXtensible Markup Language (XML) the new software greatly enhances the ability to tailor the inspection to fit the system being inspected

During the development process Region I state officials worked with developers to beta test and offer additional comments on needed functionality. Once the software neared completion a national roll out was undertaken and training began in additional regions around the country. By the end of 2003 a complete training series was develop and training began with Region 8 in Denver, Colorado.

### *CAPFinance Asset Inventory Financial Planning Tool*

In 2003 two states adopted CAPFinance as an integral part of their capacity-building efforts for small water and waste-water utilities. CAPFinance helps utilities identify the long-range financing requirements associated with maintaining capital facilities necessary for the provision of safe drinking water and reliable waste-water services. In Region 7, the Kansas Department of Health and Environment's Drinking Water Program purchased a state-wide license to distribute CAPFinance to public water systems as part of the state's drinking water capacity development program. Alaska's Department of Community and Economic Development purchased a similar distribution license to provide CAPFinance to small communities through its Rural Utilities Business Assistance Program.

### *EFC's Financial Capacity Analysis Activities*

Since 1997 the EFC has provided the function of financial capacity review to the State of Idaho's Drinking Water State Revolving Fund Program (DWSRF). In 2001 the State of Alaska's Revolving Fund Programs enlisted the EFC to provide similar financial capacity reviews for loan applicants. While these activities have been reported in previous Annual Reports, in 2003 the EFC unveiled its first report on the financial capacity characteristics of applicants to the Idaho Drinking Water State Revolving Fund.

This report, *Financial Capacity Assessment Indicators: Idaho DWSRF*, is posted on the EFC's web site and provides groundbreaking information about the financial capacity characteristics of applicants to the DWSRF. This report has led to the creation of the "Idaho Index," a set of comparative indicators of management and financial capacity. The EFC will continue to compile this information as capacity reviews are performed. The first report on Alaska's financial capacity indicators is expected in 2004.

It is expected that the EFC will provide similar third party financial capacity reviews for the Washington Department of Ecology's Clean Water SRF program, and the State of Iowa's Drinking Water Protection Program's SRF (for small private water systems) beginning in 2004.



### *Arsenic Exemption Financial Capacity Reviews*

In 2003 the Region 10 EPA solicited the assistance of the EFC in implementing a financial capacity review program in Idaho. This program was designed to provide qualifying water systems an extended implementation schedule to meet the requirements of the arsenic contamination rule as it applies to public drinking water systems. EPA Region 10 undertook this optional authority to provide exemptions at the request of the Idaho Drinking Water Program. The State of Idaho is expected to assume responsibility for this program in 2005.

In conducting its reviews, the EFC applied a capacity review methodology that was pioneered in the process of reviewing DWSRF and Clean Water SRF loan applications. We believe that this is the first time that the option to apply a financial test in order to provide relief from implementation deadlines has been used in relation to the Safe Drinking Water Act.

### *Developing New Computer-Based Tools*

EFC10 will be developing additional computer based tools this next year. Foremost among these is “AGBMP\$,” a tool for calculating the cost-benefit of implementing agricultural best management practices to improve water quality at the least cost in impaired watersheds. This tool was envisioned through a watershed financing charrette conducted by the EFC10 for the Klamath Basin Watershed Council in Oregon. This tool will help watershed groups communicate effectively with agricultural land users on the financial benefits of instituting runoff controls to benefit water quality.

## **Network Collaborations**

- Source Water Protection. The EFC is collaborating with the EFCs at the universities of New Mexico, North Carolina, Syracuse and Maryland on the source water protection project with EPA.
- Watershed Protection. The EFC will continue to collaborate with the EFC at the University of Maryland on watershed protection and watershed funding efforts.
- Directory of Watershed Resources. In 2004 the EFC10 at Boise State University will be working with EFC1 at the University of Southern Maine to replicate and establish the Database of Watershed Resources in the New England States. This Database was designed by the EFC10 and has excellent potential to be used as a national model. EPA’s Sustainable Watersheds Financing Team will be funding the project. In addition, the EFC10’s watershed financial planning software model – *Plan2Fund* – is being retooled for national distribution through the EFCN by participating EFCs.

*Plan2Fund* will be converted to a “run-time” version of Microsoft Access to be used by watershed groups across the country.

- Conferences and Meetings. The EFC will continue to collaborate with the Network to provide information and presentations at conferences.